# UNAPPROVED PARTS NOTIFICATION

SUSPECTED UNAPPROVED PARTS PROGRAM OFFICE, AVR-20 45005 AVIATION DRIVE, SUITE 214 DULLES, VA 20166-7541



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Administration

UPNs are posted on the internet at http://www.faa.gov/avr/sups.htm

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This **revised** Unapproved Parts Notification clarifies the suspect motors' serial numbers.

#### AFFECTED PART

Electric motor used in anti-collision and wing position lights.

### **PURPOSE**

The purpose of this Unapproved Parts Notification is to advise all aircraft owners, operators, maintenance entities, manufacturers, suppliers, and aircraft parts distributors of the existence of electric motors, part number A8113-1, used in anti-collision and wing position lights, that are being misrepresented as having been produced by a Federal Aviation Administration (FAA) Production Approval Holder (PAH).

## **BACKGROUND**

Grimes Aerospace (Grimes), 240 Twain Avenue, Urbana, Ohio 43078, PAH for the electric motor (part number A8113-1), reported to the FAA that they were notified of motors bearing the Grimes part number and having characteristics different from the motors produced by Grimes. Grimes indicated that the documentation accompanying the suspect motors was not traceable to any records in the Grimes manufacturing or shipping history.

According to Grimes, the distinguishing characteristics of the motors include the following:

- The size of the bearings in the suspect motors is different from the size of bearings in a Grimes motor.
- Grimes uses an ink stamp for the identification of the part; the suspect motors have identification affixed by metal plates.
- Grimes motors are not serialized; invoice documents indicate that the suspect motors have serial numbers 235 through 384. However, the suspect motors are not limited to those known serial numbers.
- Both shaft ends on the Grimes motor are sealed; the shaft end(s) on the suspect motors is/are open. The shaft bearing is visible on the suspect motor.
- The wires protruding from the Grimes motor housing are sealed with a rubber grommet; the suspect motor's housing is sealed with silicon.

At this time, the FAA is not aware of any reported motor failures. This notification, however, is being issued because Grimes has stated the suspect motors cannot be traced to their production process; nor does any evidence exist that the suspect motors were manufactured under any FAA production approval process.

### RECOMMENDATION

Regulations require that type-certificated products conform to their type design. Aircraft owners, operators, maintenance organizations, manufacturers' suppliers, and aircraft parts distributors should verify the FAA approval status of the anti-collision and wing position light motors. Motors that cannot be traced to a FAA-approved source should be considered suspect and reported to the local FAA Manufacturing Inspection

District/Satellite Office (MIDO/MISO). If any of the referenced motors are installed on aircraft, appropriate action should be taken. If found in existing aircraft parts stock, it is recommended that the motors be quarantined to prevent installation until a determination can be made regarding each motor's eligibility for installation.

## **FURTHER INFORMATION**

Further information regarding this investigation may be obtained from the FAA MIDO referenced below. The FAA would appreciate any information regarding the discovery of the above-referenced part from any source, the means used to identify the source, and the action taken to remove the part from service or stock.

This notice originated from the FAA Manufacturing Inspection District Office, One Crown Center, 1895 Phoenix Blvd., Suite 475, Atlanta, GA 30349, telephone (770) 703-6100, fax (770) 703-6108; and was published through the FAA Suspected Unapproved Parts Program Office, AVR-20, telephone (703) 661-0580, fax (703) 661-0113.